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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/415,679	10/08/1999	XI CHEN	15962-0012	5155

7590 09/09/2003  
SQUIRE, SANDERS & DEMPSEY  
14TH  
8000 TOWERS CRESCENT DRIVE  
TYSONS CORNER, VA 22182-2700

EXAMINER

CHANG, EDITH M

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 09/09/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/415,679

Applicant(s)

CHEN, XI

Examiner

Edith M Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment/Arguments*

1. Applicant's arguments filed on June 27, 2003 have been fully considered but they are not persuasive.

Regarding claims 2-4, Crayford discloses all subject matter *claimed* listed in the previous action: a transceiver circuit comprising: a transmitter subcircuit, and a receiver subcircuit for transmitting and receiving industry-standard data signals which is the 10Base standards and not conform to industry-standard pulse which is the 100Base (MLT3) standard. In FIG.2 and FIG.3 the transceiver 37 outputs a beat pulse 60, by detecting the pulses 60 produced by the transceiver 37, the transceiver 37a acknowledges the transceiver 37 is alive and the link can be established (column 3 lines 44-58). The limitations (e.g. the differences stated in the arguments) in the specification do not read in the claim when these limitations are *not recited in the claim* (see MPEP 2111).

Regarding claims 5-20 & 22-23, Wakeley et al. (U.S. Patent 6198727 B1) teaches the 100Base (auto-negotiating, MLT3, etc.) and the apparatus and its methods for 10Base-T/100Base-TX compliance (Abstract, column 2 lines 12-25). With Wakeley et al.'s teaching (FIG.2 & FIG.3), Crayford's (U.S. Patent 5404544) 10Base-T system transmitting signal to/from sleeping node identifying its existence to manage the power consumption can implement the teachings to link to all 10Base-T/100Base-TX partners regardless of their capability (column 2 lines 56-60 '727) and have all subjects matter *as claimed*.

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2. In regard to the remarks on claims 2-23, the applicant traverses the rejection on the basis of arguments for the previous claims. The examiner upholds the rejection on the basis as stated above.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the power supply for activation and deactivation of the transmitter means and the power supply for activation and deactivation of the receiver of a transceiver circuit must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2-4, & 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Crayford (U.S. Patent 5404544).

Regarding **claim 2**, Crayford discloses a transceiver circuit for transmitting and receiving industry-standard data signals (column 3 line 12-17, lines 34-36, FIG. 1-2) comprising: a transmitter subcircuit, which is a transmitter subcircuit means, transmitting a pulse which does not conform to industry-standard pulse (column 4 lines 4-6, 15-17, 24-28, FIG.-5B) during powered-down mode (column 4 lines 4-13) for indicating a live transceiver (column 3 lines 44-51), and a receiver subcircuit (FIG.-5B) that is a receiver subcircuit means; the transmitter and receiver has its own power supply (column 7 line 68-column 8 line 5) and means for activation and deactivation (column 4 lines 13-17, column 5-6 Table: Bit 7 lines 9-14 & 21-24, column 8 lines 6-9, 13-17, column 7 lines 54, 102 & 104 FIG.-5A).

Regarding **claims 3 & 4**, Crayford discloses the pulse is a link pulse (column 3 lines 47-48, FIG.-2 & -3) and is a minimally powered pulse.

Regarding **claim 21**, Crayford discloses a transceiver circuit for transmitting and receiving industry-standard data signals (FIG.-1, column 3 lines 10-20), the transceiver circuit comprising: transmitter subcircuit means for transmitting a pulse during powered-down mode (column 4 lines 4-13) to indicate a live transceiver circuit (column 3 lines 44-51), wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver (column 4 lines 4-6, 15-17, 24-28, FIG.-5B); receiver subcircuit means (FIG.-5B) for receiving data; wherein the transmitter subcircuit means and the receiver subcircuit means each have its own means for activation and deactivation (column 4 lines 13-17, column 5-6 Table: Bit 7 lines 9-14 & 21-24, column 8 lines 6-9, 13-17, column 7 lines 54, 102 & 104 FIG.-5A), and Crayford discloses the receiver having its own power supply that it can remain powered and receive chain remain operable, including the ability to detect link pulses while entire AUI is powered down

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(column 7 line 68- column 8 lines 5). The transmitter and receiver each have its own power supply.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-20, & 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crayford (U.S. Patent 5404544) in view of Wakeley et al. (U.S. Patent 6198727 B1).

Regarding **claims 5**, Crayford does not specify the pulse conforming to an industry-standard pulse, however Wakeley et al. teach the pulse conforming to an industry-standard pulse (column 1 lines 49-55, column 4 lines 37-48). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the Wakeley et al.'s teaching implemented in Crayford's system to link automatically to all 10Base-T/100Base-TX partners regardless of their capability (column 1 lines 7-11, column 3 lines 64-column 4 lines 2).

Regarding **claims 6**, Crayford does not specify the transceiver entering into auto-negotiation mode to identify the received signal, however Wakeley et al. teach the auto-negotiation process (column 3 lines 49-56). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the Wakeley et al.'s teaching implemented in Crayford's system to link automatically to all 10Base-T/100Base-TX partners regardless of their capability (column 1 lines 7-11, column 3 lines 64-column 4 lines 2).

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Regarding **claims 7, 10 & 22**, Crayford does not specify the receiver having a media independent interface, however Wakeley et al. teach the media independent interface in the LAN layers (18 FIG. 1). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to cooperate the Wakeley et al.'s teaching in Crayford's system for the schematic detail of the LAN OSI reference model and for receiving signal from the network via the interface.

Regarding **claim 8**, Crayford discloses the receiver upon receiving activity (column 4 lines 24-28) activating the transceiver into power-on mode (column 4 lines 28-30 & 32-36).

Regarding **claim 9**, Crayford discloses the transceiver in power-down mode powering-down all subcircuits except the transmitter pulse subcircuit (column 2 lines 33-36, column 3 lines 44-48) and the media independent interface subcircuit (column 2 lines 18-22, column 3 lines 48-51).

Regarding **claims 11 & 12**, inherent the limitations of claim 10, Crayford discloses the pulse is a link pulse (column 3 lines 47-48, FIG.-2 & -3) and is a minimally powered pulse.

Regarding **claim 13**, inherent the limitations of claim 10, Crayford does not specify the pulse conforming to an industry-standard pulse, however Wakeley et al. teach the pulse conforming to an industry-standard pulse (column 1 lines 49-55, column 4 lines 37-48). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the Wakeley et al.'s teaching implemented in Crayford's system to link automatically to all 10Base-T/100Base-TX partners regardless of their capability (column 1 lines 7-11, column 3 lines 64-column 4 lines 2).

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Regarding **claim 14**, inherent the limitations of claim 13, Crayford does not specify the transceiver entering into auto-negotiation mode to identify the received signal, however Wakeley et al. teach the auto-negotiation process (column 3 lines 49-56). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the Wakeley et al.'s teaching implemented in Crayford's system to link automatically to all 10Base-T/100Base-TX partners regardless of their capability (column 1 lines 7-11, column 3 lines 64-column 4 lines 2).

Regarding **claims 15**, inherent the limitations of claim 10, Crayford discloses the receiver upon receiving activity (column 4 lines 24-28) activating the transceiver into power-on mode (column 4 lines 28-30 & 32-36).

Regarding **claims 16**, inherent the limitations of claim 10, Crayford discloses the transceiver in power-down mode powering-down all subcircuits except the transmitter pulse subcircuit (column 2 lines 33-36, column 3 lines 44-48) and the media independent interface subcircuit (column 2 lines 18-22, column 3 lines 48-51).

Regarding **claims 17 & 23**, Crayford has all subject matter claimed except the media independent interface, however Wakeley et al. teach the media independent interface in the LAN layers (18 FIG. 1). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to cooperate the Wakeley et al.'s teaching in Crayford's system for the schematic detail of the LAN OSI reference model and for receiving signal from the network via the interface.

Regarding **claim 18**, Crayford does not specify the pulse conforms to an industry-standard pulse, however Wakeley et al. teach the pulse conforming to an industry-standard pulse (column 1 lines 49-55, column 4 lines 37-48). At the time of the invention, it would have been

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obvious to a person of ordinary skill in the art to have the Wakeley et al.'s teaching implemented in Crayford's system to link automatically to all 10Base-T/100Base-TX partners regardless of their capability (column 1 lines 7-11, column 3 lines 64-column 4 lines 2).

Regarding **claim 19**, Crayford does not specify the transceiver entering into auto-negotiation mode to identify the received signal, however Wakeley et al. teach the auto-negotiation process (column 3 lines 49-56). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the Wakeley et al.'s teaching implemented in Crayford's system to link automatically to all 10Base-T/100Base-TX partners regardless of their capability (column 1 lines 7-11, column 3 lines 64-column 4 lines 2).

Regarding **claims 20**, inherent the limitations of claim 17, Crayford discloses the transceiver in power-down mode powering-down all subcircuits except the transmitter pulse subcircuit (column 2 lines 33-36, column 3 lines 44-48) and the media independent interface subcircuit (column 2 lines 18-22, column 3 lines 48-51).

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 703-305-3416. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4800.

Edith M Chang  
September 2, 2003

  
**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINE**  
**TECHNOLOGY CENTER 2600**